#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Atty. Docket: WESTMAN=3

In re Patent of:

Jacob WESTMAN et al.

U.S. Pat. No. 7,759,361

Issued: July 20, 2010

For: AZABICYCLOOCTAN-3-ONE DERIVATIVES AND USE...

Atty. Docket: WESTMAN=3

November: WESTMAN=3

November: MESTMAN=3

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#### REQUEST FOR CERTIFICATE OF CORRECTION UNDER 37 C.F.R. §1.323

Honorable Commissioner for Patents U.S. Patent and Trademark Office Randolph Building, Mail Stop Post Issue 401 Dulany Street Alexandria, VA 22314

#### Sir:

In checking over the printed copy of the above-identified patent, we have found the following errors, some of which are the fault of the Patent and Trademark Office (PTO) and some of which are the fault of applicant. It is respectfully requested that these errors be corrected in accordance with 37 CFR §1.322 and 37 CFR §1.323. The errors to be corrected are listed below.

When the change that was the fault of applicant is considered, it will be clear that the error is of a typographical or clerical error in nature and/or of minor character, which occurred in good faith. Correction thereof

does not involve such a change in the patent as would constitute "new matter" or would require reexamination.

In claim 1, column 39, line 15, the phrase "form an substituted" should read "form a substituted". This error is an obvious grammatical error of minor nature, inadvertently introduced by applicant in the last entered amendment filed August 21, 2009.

In claim 1, column 39, lines 18-19, "C1-C10 a alkyl" should read "C1-C10 alkyl". This error was introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 1, column 39, line 20, "C1-C10 a heteroaryl" should read "C1-C10 heteroaryl". This error was introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 1, column 39, lines 20-21, "C1-C10 a heterocyclyl" should read "C1-C10 heterocyclyl". This error was introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 1, column 39, line 22, "C1-C10 a alkyloxy" should read "C1-C10 alkyloxy". This error was introduced by

the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 1, column 39, line 23, "C1-C10 a alkylamino" should read "C1-C10 alkylamino". This error was introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 1, column 39, line 27, "C1-C10 a alkyl" should read "C1-C10 alkyl". This error was introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 2, column 40, line 23, the phrase "are -CH<sub>2</sub>;" should read "are -CH<sub>2</sub>OH;". This error in claim 2 (which was renumbered from claim 4 during prosecution), was also introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 3, column 40, line 42, the phrase "A of formula (I)" should read "A compound of formula (I)". This error in claim 3 (which was renumbered from claim 5 during prosecution) was introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 3, column 41, line 17, the formula "CONR<sup>5</sup>R<sup>7</sup>" should read "CONR<sup>6</sup>R<sup>7</sup>". This error in claim 3 (which was renumbered from claim 5 during prosecution) was introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 4, column 42, line 3, the formula "COR<sup>5</sup>" should read "COR<sup>6</sup>". This error in claim 4 (which was renumbered from claim 6 during prosecution) was introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 15, column 56, line 51, the formula " $CH_2$ -O-CO- $NR^4R^5$ " should read " $-CH_2$ -O-CO- $NR^4R^5$ ". This error (the omission of the first hyphen) in claim 3 (which was renumbered from claim 5 during prosecution) was introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 15, column 57, line 5, the formula "C1-C10 a heteroaryl" should read "C1-C10 heteroaryl". This error in claim 15 (which was renumbered from claim 20 during prosecution) was introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

In claim 15, column 57, line 11, the formula "C1-C10 a alkyl" should read "C1-C10 alkyl". This error in claim 15

(which was renumbered from claim 20 during prosecution) was introduced by the PTO in the printing of the patent after allowance, following the last entered amendment of August 21, 2009.

As proof that unequivocally supports patentee's assertions as to PTO error, attached hereto, as supporting documentation is a full copy of the last filed amendment of August 21, 2009, prior to notice of allowance issuance.

Attached is a Certificate of Correction form showing the above-identified corrections. The present proposed changes will require no additional examination on the part of the examiner as the corrections are merely the correction of typographical errors.

The attached certificate of correction effects this correction.

Submitted herewith is a credit card authorization in the amount of \$100.00 to cover the appropriate fee for corrections under 37 CFR §1.323. If insufficient fees are specifically authorized, please charge same to Deposit Account No. 02-4035.

In re of U.S. Patent No. 7,759,361

Granting of this request is earnestly solicited.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C. Attorneys for Applicant(s)

Ву

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#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Jacob WESTMAN et al. Art Unit: 1625 Application No.: 10/590,054 Confirmation No.: 5605 Examiner: N. RAHMANI Filed: August 21, 2006 Washington, D.C. For: AZABICYCLOOCTAN-3-ONE DERIVATIVES AND USE... Atty.'s Docket: WESTMANN-3 Customer Service Window, Mail Stop RCE Date: August 21, 2009 Honorable Commissioner for Patents U.S. Patent and Trademark Office Randolph Building, 401 Dulany Street Alexandria, Virginia 22314 Sir: AMENDMENT AND REPLY SUBMITTED WITH A REQUEST FOR CONTINUED EXAMINATION UNDER 37 CFR §1.114 Transmitted herewith is a [XX] AMENDMENT AND REPLY SUBMITTED WITH A REQUEST FOR CONTINUED EXAMINATION UNDER 37 CFR §1.114 in the above-identified application. [XX] Small Entity Status: Applicant(s) claim small entity status. See 37 C.F.R. §1.27. No additional fee is required. [XX] The fee has been calculated as shown below: (Col. 1) (Col. 3) SMALL ENTITY OTHER THAN SMALL ENTITY (Col. 2) HIGHEST NO. ADDITIONAL CLAIMS PRESENT RATE OR RATE ADDITIONAL REMAINING PREVIOUSLY **EXTRA** AFTER PAID FOR **EQUALS** AMENDMENT TOTAL MINUS 26 \$ 26.00 52 \$ 21 20 \$ INDEP 8 3 5 110 \$550.00 220 MINUS FIRST PRESENTATION OF MULTIPLE DEP. CLAIM 195 390 \$ ADDITIONAL FEE TOTAL \$576.00 OR TOTAL \$ If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3. If the "Highest Number Previously Paid for" IN THIS SPACE is less than 20, write "20" in this space. If the "Highest Number Previously Paid for" IN THIS SPACE is less than 3, write "3" in this space. The "Highest Number Previously Paid For" (total or independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment of the number of claims originally filed. [XX] Conditional Petition for Extension of Time If any extension of time for a response is required, applicant requests that this be considered a petition therefor. [XX] It is hereby petitioned for an extension of time in accordance with 37 CFR 1.136(a). The appropriate fee required by 37 CFR 1.17 is calculated as shown below: Small Entity Other Than Small Entity Response Filed Within Response Filed Within [XX] First \$ 65.00 First \$ 130.00 \$ 245.00 - \$ 490.00 Third - \$ 555.00 Third - \$ 1110.00 Fourth - \$ 865.00 - \$ 1730.00 Γ 1 [ ] Fourth Month After Time Period Set Month After Time Period Set \_\_\_) already paid for \_\_\_\_ month(s) extension of time on \_\_ Less fees (\$ [ ] Please charge my Deposit Account No. 02-4035 in the amount of \$\_ [XX] Credit card payment authorizing payment in the amount of \$641.00 [ ] A check in the amount of \$ is attached (check no. ). [XX] The Commissioner is hereby authorized and requested to charge any additional fees which may be required in connection with this application or credit any overpayment to Deposit Account No. 02-4035. This authorization and request is not limited to payment of all fees associated with this communication, including any Extension of Time fee, not covered by check or specific authorization, but is also intended to include all fees for the presentation of extra claims under 37 CFR §1.16 and all patent processing fees under 37 CFR §1.17 throughout the prosecution of the case. This blanket authorization does not include patent issue fees under 37 CFR §1.18. BROWDY AND NEIMARK, P.L.L.C. Attorneys for Applicant(s)

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#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Atty. Docket: WESTMAN=3

In re Application of:

Jacob WESTMAN et al.

Appln. No.: 10/590,054

Filed: August 21, 2006

For: AZABICYCLOOCTAN-3-ONE
DERIVATIVES AND USE...

Description:

Conf. No.: 5605

Art Unit: 1625

Examiner: N. RAHMANI

Washington, D.C.

August 21, 2009

# AMENDMENT AND REPLY SUBMITTED WITH A REQUEST FOR CONTINUED EXAMINATION UNDER 37 CFR §1.114

Honorable Commissioner for Patents U.S. Patent and Trademark Office Randolph Building, Mail Stop: RCE 401 Dulany Street Alexandria, VA 22314

Sir:

This paper is fully responsive to the final Office

Action of June 12, 2009 and is being submitted with a Request

for Continued Examination (RCE) pursuant to 37 C.F.R. § 1.114.

The period for response has been extended by one month by

Petition for Extension of Time.

Amendments to the Claims are reflected in the listing of claims that begins on page 2 of this paper.

Remarks/Arguments begin on page 24 of this paper.

#### AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

#### Listing of Claims:

1. (Currently Amended) A method of treating a disorder by using cancer comprising:

administering, to a patient in need thereof, an effective amount of a compound of formula (I)

$$\mathbb{R}^3$$
 $\mathbb{R}^1$ 
 $\mathbb{R}^2$ 

wherein

(i)  $R^1$  and  $R^2$  are the same or different and are selected from H,  $-CH_2-O-R^5$ ,  $-CH_2-O-SO_2-R^5$ ,  $-CH_2-S-R^5$ ,  $-CH_2-O-CO-R^5$ ;

$$R^3$$
 is =0:

R<sup>4</sup> and R<sup>5</sup> are the same or different and are selected from H; substituted or non-substituted, unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; substituted or non-substituted benzyl; substituted or non-substituted mono- or bicyclic aryl; substituted or non-substituted mono-, bi- or tricyclic C1-C10 heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are

independently selected from N, O and S; or R<sup>4</sup> and R<sup>5</sup> in -NR<sup>4</sup>R<sup>5</sup> are bonded together and form, together with the nitrogen atom to which they are bonded, a substituted or non-substituted non-aromatic C1-C10 mono- or bicyclic heterocyclyl optionally containing one or several further heteroatoms independently selected from N, O and S and optionally comprising one or several cyclic keto groups;

with the proviso that when  $\mbox{R}^1$  and  $\mbox{R}^2$  are both  $-\mbox{CH}_2-\mbox{OR}^5$  then both  $\mbox{R}^5$  are not H; and

with the further proviso that  $\ensuremath{R^1}$  and  $\ensuremath{R^2}$  are not both H; or

(ii) R<sup>1</sup> and R<sup>2</sup> together with the carbon atom to which they are bonded form an substituted or non-substituted cyclic carbonate; wherein the substituents of the substituted groups are selected from unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; halogen; monoor bicyclic aryl; mono-, bi- or tricyclic C1-C10 heteroaryl and non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; C1-C10 alkyloxy; amino; C1-C10 alkylamino; COR<sup>6</sup>; CONR<sup>6</sup>R<sup>7</sup>; and COOR<sup>6</sup>;

R<sup>6</sup> and R<sup>7</sup> are the same or different and are selected from H; unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; benzyl; mono- or bicyclic aryl; mono-, bi- or tricyclic heteroaryl or non-aromatic C1-

C10 heterocyclyl wherein the hetero-atoms are independently selected from N, O and S; or

a pharmaceutically acceptable salt thereof,

hyperproliferative diseases, by administering said compound in an effective amount for said disorder, to a patient in need thereof.

# 2-3. (Cancelled)

4. (Currently Amended) A process for the preparation of a compound according to claim 3 of formula (I)

$$R^3$$
 $R^2$ 

wherein

(i)  $R^1$  and  $R^2$  are the same or different and are selected from H,  $-CH_2OH$ ,  $-CH_2-O-CO-R^5$ ,  $-CH_2-O-CO-NR^4R^5$  and  $-CH_2-O-CO-OR^5$ ;

 $R^3$  is =0;

R<sup>4</sup> and R<sup>5</sup> are the same or different and are selected from H; substituted or non-substituted, unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; substituted or non-substituted benzyl; substituted or

non-substituted mono- or bicyclic aryl; substituted or non-substituted mono-, bi- or tricyclic C1-C10 heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; or R<sup>4</sup> and R<sup>5</sup> in -NR<sup>4</sup>R<sup>5</sup> are bonded together and form, together with the nitrogen atom to which they are bonded, a substituted or non-substituted non-aromatic C1-C10 mono- or bicyclic heterocyclyl optionally containing one or several further heteroatoms independently selected from N, O and S and optionally comprising one or several cyclic keto groups;

with the proviso that  $R^1$  and  $R^2$  are not both selected from H and  $-CH_2OH$ ; or

(ii) R<sup>1</sup> and R<sup>2</sup> together with the carbon atom to which they are bonded form a substituted or non-substituted cyclic carbonate; wherein the substituents of the substituted groups are selected from unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; halogen; mono-or bicyclic aryl; mono-, bi- or tricyclic C1-C10 heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; C1-C10 alkyloxy; amino; C1-C10 alkylamino; COR<sup>6</sup>; CONR<sup>6</sup>R<sup>7</sup>; and COOR<sup>6</sup>;

R<sup>6</sup> and R<sup>7</sup> are the same or different and are selected from H; unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; benzyl; mono- or bicyclic aryl; mono-, bi- or tricyclic heteroaryl or non-aromatic C1-

# ${ t C10}$ heterocyclyl wherein the hetero-atoms are independently selected from N, O and S; or

 $\begin{tabular}{llll} a pharmaceutically acceptable salt of the compound \\ of formula (I), \end{tabular}$ 

by said process comprising reacting a compound of
said formula (I)

$$R^3$$
 $R^2$ 
 $R^2$ 

wherein

 $R^{1}$ ,  $R^{2}$  and  $R^{3}$  are as defined in claim 3, provided that at least one of  $R^{1}$  and  $R^{2}$  is -CH<sub>2</sub>OH; or wherein both  $R^{1}$  and  $R^{2}$  are -CH<sub>2</sub>OH and  $R^{3}$  is as defined in claim 3;

with a compound of formula  $R^5$ -CO-X,  $NR^4R^5$ -CO-X, or  $R^5$ O-CO-X; wherein X is a leaving group; under conditions suitable for transforming at least one of  $R^1$  and  $R^2$  into -CH<sub>2</sub>-O-CO- $R^5$ , -CH<sub>2</sub>-O-CO- $NR^4R^5$  or -CH<sub>2</sub>-O-CO- $R^5$  wherein  $R^4$  and  $R^5$  are as defined in claim 3;

5. (Currently Amended) A compound according to claim
3 of formula (I)

$$\mathbb{R}^3$$
 $\mathbb{R}^2$ 

(I)

wherein

(i)  $R^1$  and  $R^2$  are the same or different and are selected from H,  $-CH_2OH$ ,  $-CH_2-O-CO-R^5$ ,  $-CH_2-O-CO-NR^4R^5$  and  $-CH_2-O-CO-OR^5$ ;

 $R^3$  is =0;

R<sup>4</sup> and R<sup>5</sup> are the same or different and are selected from H; substituted or non-substituted, unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; substituted or non-substituted benzyl; substituted or non-substituted mono- or bicyclic aryl; substituted or non-substituted mono-, bi- or tricyclic C1-C10 heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; or R<sup>4</sup> and R<sup>5</sup> in -NR<sup>4</sup>R<sup>5</sup>

are bonded together and form, together with the nitrogen atom to which they are bonded, a substituted or non-substituted non-aromatic C1-C10 mono- or bicyclic heterocyclyl optionally containing one or several further heteroatoms independently selected from N, O and S and optionally comprising one or several cyclic keto groups;

with the proviso that  $R^1$  and  $R^2$  are not both selected from H and  $-CH_2OH$ ; or

(ii) R<sup>1</sup> and R<sup>2</sup> together with the carbon atom to which they are bonded form a substituted or non-substituted cyclic carbonate; wherein the substituents of the substituted groups are selected from unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; halogen; mono-or bicyclic aryl; mono-, bi- or tricyclic C1-C10 heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; C1-C10 alkyloxy; amino; C1-C10 alkylamino; COR<sup>6</sup>; CONR<sup>6</sup>R<sup>7</sup>; and COOR<sup>6</sup>;

R<sup>6</sup> and R<sup>7</sup> are the same or different and are selected from H; unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; benzyl; mono- or bicyclic aryl; mono-, bi- or tricyclic heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the hetero-atoms are independently selected from N, O and S; or

a pharmaceutically acceptable salt of the compound of formula (I), for use as a medicament.

6. (Currently Amended) A pharmaceutical composition comprising a therapeutically effective amount of a compound according to claim 3, of formula (I)

$$R^3$$
 $R^2$ 

(I)

#### wherein

(i)  $R^1$  and  $R^2$  are the same or different and are selected from H,  $-CH_2OH$ ,  $-CH_2-O-CO-R^5$ ,  $-CH_2-O-CO-NR^4R^5$  and  $-CH_2-O-CO-OR^5$ ;

 $R^3$  is =0;

R<sup>4</sup> and R<sup>5</sup> are the same or different and are selected from H; substituted or non-substituted, unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; substituted or non-substituted benzyl; substituted or non-substituted mono- or bicyclic aryl; substituted or non-substituted mono-, bi- or tricyclic C1-C10 heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; or R<sup>4</sup> and R<sup>5</sup> in -NR<sup>4</sup>R<sup>5</sup> are bonded together and form, together with the nitrogen atom to which they are bonded, a substituted or non-substituted non-aromatic C1-C10 mono- or bicyclic heterocyclyl optionally

containing one or several further heteroatoms independently selected from N, O and S and optionally comprising one or several cyclic keto groups;

with the proviso that  $R^1$  and  $R^2$  are not both selected from H and  $-CH_2OH$ ; or

(ii) R<sup>1</sup> and R<sup>2</sup> together with the carbon atom to which they are bonded form a substituted or non-substituted cyclic carbonate; wherein the substituents of the substituted groups are selected from unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; halogen; mono-or bicyclic aryl; mono-, bi- or tricyclic C1-C10 heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; C1-C10 alkyloxy; amino; C1-C10 alkylamino; COR<sup>6</sup>; CONR<sup>6</sup>R<sup>7</sup>; and COOR<sup>6</sup>;

R<sup>6</sup> and R<sup>7</sup> are the same or different and are selected from H; unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; benzyl; mono- or bicyclic aryl; mono-, bi- or tricyclic heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the hetero-atoms are independently selected from N, O and S; or a pharmaceutically acceptable salt or prodrug thereof, and

at least one pharmaceutically acceptable excipient.

7. (Original) A pharmaceutical composition according to claim 6, comprising at least one further, pharmaceutically active compound.

#### 8. (Cancelled)

- 9. (Previously Presented) A pharmaceutical composition according to claim 7, wherein the at least one further active compound *in vivo* is susceptible of reacting with glutathione.
- 10. (Currently Amended) A pharmaceutical composition according to claim 7 or claim 9, wherein the <u>at least one</u> further pharmaceutically active compound is selected from the group consisting of adriamycin, melphalan and cisplatin.

11. (Currently Amended) A method of treatment of a disease selected from hyperproliferative diseases, by administration of treating a cancer comprising:

administering, to a patient in need thereof, a therapeutically effective amount of a compound of formula (I)

$$R^3$$
 $R^2$ 

(I)

wherein

(i)  $R^1$  and  $R^2$  are the same or different and are selected from H,  $-CH_2-O-R^5$ ,  $-CH_2-O-SO_2-R^5$ ,  $-CH_2-S-R^5$ ,  $-CH_2-O-CO-R^5$ ;

$$R^3$$
 is =0;

R<sup>4</sup> and R<sup>5</sup> are the same or different and are selected from H; substituted or non-substituted, unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; substituted or non-substituted benzyl; substituted or non-substituted mono- or bicyclic aryl; substituted or non-substituted mono-, bi- or tricyclic C1-C10 heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; or R<sup>4</sup> and R<sup>5</sup> in -NR<sup>4</sup>R<sup>5</sup> are bonded together and form, together with the nitrogen atom

to which they are bonded, a substituted or non-substituted non-aromatic C1-C10 mono- or bicyclic heterocyclyl optionally containing one or several further heteroatoms independently selected from N, O and S and optionally comprising one or several cyclic keto groups;

with the proviso that when  $R^1$  and  $R^2$  are both  $-CH_2-OR^5$  then both  $R^5$  are not H; and

with the further proviso that when one of  $R^1$  and  $R^2$  is H and the other one is  $-CH_2-NR^4R^5$ , then  $R^4$  and  $R^5$  are not substituted or non-substituted monocyclic aryl; or

(ii) R<sup>1</sup> and R<sup>2</sup> together with the carbon atom to which they are bonded form a substituted or non-substituted cyclic carbonate; wherein the substituents of the substituted groups are selected from unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; halogen; monoor bicyclic aryl; mono-, bi- or tricyclic C1-C10 heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; C1-C10 alkyloxy; amino; C1-C10 alkylamino; COR<sup>6</sup>; CONR<sup>6</sup>R<sup>7</sup>; and COOR<sup>6</sup>;

R<sup>6</sup> and R<sup>7</sup> are the same or different and are selected from H; unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; benzyl; mono- or bicyclic aryl; mono-, bi- or tricyclic heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; or

a pharmaceutically acceptable salt  $\frac{1}{2}$  or  $\frac{1}{2}$  thereof.

to a patient in the need of such treatment.

12. (Currently Amended) The method according to claim 11, wherein the compound of formula (I) is administered together with a <u>at least one</u> further, pharmaceutically active compound.

#### 13. (Cancelled)

- 14. (Currently Amended) The method according to the claim 12 wherein, the at least one further pharmaceutically active compound in vivo is susceptible of reacting with glutathione.
- 15. (Currently Amended) The method according to claim 12 or claim 14, wherein the at least one further pharmaceutically active compound is selected from the group consisting of adriamycin, melphalan, and cisplatin.
- 16. (Currently Amended) A method of treating a mammal suffering from a hyperproliferative disease cancer,

comprising administering to said mammal in need thereof a therapeutically effective amount of a compound selected from the group consisting of:

O OH		
O OH	F ,	
H <sub>2</sub> N O HO		

LN CO CN	A COLO	
		The office of the state of the
		LN LOON
LN CO	LN COL	LN CO
S ,		S,

LN COL	LN COLOL	LN CO
S H N N N N N N N N N N N N N N N N N N	LN COO,	OH OH
O=S=O		

# 17. (Cancelled)

18. (Currently Amended) A compound selected from the group consisting of:

F O O O O O O O O O O O O O O O O O O O	$H_2N$	
	LN LOOP ,	LN LOOO
The office of the state of the	LA COLON	
	LN LOO L	

	LN LOOL ,	LN COLON
LN LO	THE OF	
	CI CI CI CI CI ,	LN CON ,
NH <sub>2</sub>	and	- <u>'</u>

- 19. (Previously Presented) The process according to claim 4, wherein X is Cl.
- 20. (Currently Amended) The  $\underline{A}$  compound according to claim 3, of formula (I)

$$R^3$$
 $R^2$ 
 $(I)$ 

wherein

 $$\rm R^{1}$$  and  $\rm R^{2}$  are the same or different and are both selected from the group consisting of  $-CH_{2}-O-CO-R^{5}$ ,  $-CH_{2}-O-CO-NR^{4}R^{5}$  and  $-CH_{2}-O-CO-OR^{5}$ [[.]];

 $R^3$  is =0;

R<sup>4</sup> and R<sup>5</sup> are the same or different and are selected from H; substituted or non-substituted, unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; substituted or non-substituted benzyl; substituted or

mon-substituted mono- or bicyclic aryl; substituted or non-substituted mono-, bi- or tricyclic C1-C10 heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; or R<sup>4</sup> and R<sup>5</sup> in -NR<sup>4</sup>R<sup>5</sup> are bonded together and form, together with the nitrogen atom to which they are bonded, a substituted or non-substituted non-aromatic C1-C10 mono- or bicyclic heterocyclyl optionally containing one or several further heteroatoms independently selected from N, O and S and optionally comprising one or several cyclic keto groups;

wherein the substituents of the substituted groups are selected from unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; halogen; monoor bicyclic aryl; mono-, bi- or tricyclic C1-C10 heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the heteroatoms are independently selected from N, O and S; C1-C10 alkyloxy; amino; C1-C10 alkylamino; COR<sup>6</sup>; CONR<sup>6</sup>R<sup>7</sup>; and COOR<sup>6</sup>;

R<sup>6</sup> and R<sup>7</sup> are the same or different and are selected from H; unbranched or branched, saturated or unsaturated C3-C12 cycloalkyl or C1-C10 alkyl; benzyl; mono- or bicyclic aryl; mono-, bi- or tricyclic heteroaryl or non-aromatic C1-C10 heterocyclyl wherein the hetero-atoms are independently selected from N, O and S; or

a pharmaceutically acceptable salt thereof.

- 21. (New) A compound according to claim 18, or a pharmaceutically acceptable salt thereof, for use as a medicament.
- 22. (New) A compound according to claim 20, or a pharmaceutically acceptable salt thereof, for use as a medicament.
- 23. (New) A method of treating a cancer comprising administering an effective amount of the compound according to claim 18 to a patient in need thereof.
- 24. (New) A method of treating a cancer comprising administering an effective amount of the compound according to claim 20 to a patient in need thereof.
- 25. (New) A pharmaceutical composition comprising a therapeutically effective amount of the compound according to claim 18.
- 26. (New) A pharmaceutical composition comprising a therapeutically effective amount of the compound according to claim 20.

#### REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

## I. Advisory Action

In the Advisory Action of July 24, 2009, the Examiner denied entry of the amendments in the After Final Amendment of June 19, 2009 on grounds that they raise new issues requiring further consideration and/or search.

In reply, Applicants herein submit an RCE to gain entry of the after final amendments pursuant to the provisions of 37 C.F.R. § 1.114. The arguments set forth in the After Final Amendment are reiterated herein by reference as they apply to the claims as amended by way of the present amendment.

Based on the comments in item 11 of the Advisory

Action, the Examiner appears to talking about the new proviso

clause in claims 3 and 11. Yet, the Examiner's position with

respect to the new matter rejection of claim 3 is unclear. It

is unclear from the comments whether: (1) the new proviso

clause in claims 3 and 11, if entered, would overcome the new

matter rejection of claim 3, but possibly raises new issues

and is thus the basis for its non-entry; or (2) the Examiner

considers the new proviso clause to be new matter.

Further, it appears that the Examiner now takes the position that the enablement rejection would be maintained, because the Rule 132 Declaration is good enough for cancer, but not all disorders. This appears to be a new ground of rejection, because the current enablement rejection as set forth in the final Office Action mentions nothing with respect to limiting the claims to cancer.

The Examiner also argues that the 102(b) prior art rejection will be maintained, if the new matter rejection is withdrawn. However, there is no prior art rejection currently applied against the claims. Perhaps, the Examiner meant to say it would be reinstated.

The Examiner indicated that claim 18 is allowed and claims 2, 4-7, 9, 10, 19 and 20 are only objected to, but are otherwise indicated as being directed to allowable subject matter.

#### II. Claim Status and Amendments

The positions set forth in the Advisory Action are traversed. Nonetheless, for the sole purpose of expediting prosecution and not to acquiesce to the Examiner's positions, Applicants have amended the claims in manner believed to fully address these concerns by incorporating the subject matter indicated as allowable.

To start, the claims have been amended in a manner to incorporate the allowable subject matter and to better conform to US claim form and practice. For instance, claim 1 is amended to specify that the disorder is cancer and to incorporate subject matter of claim 2 (now cancelled). Claims 1 and 11 are amended to comprising format and to better conform to US claim form and practice. Claims 4-6 are amended to incorporate subject matter of claim 3 (now cancelled). Claims 10 and 15 are amended to better conform to US practice for antecedent basis. Claims 12 and 14 are amended to better conform to US practice with respect to antecedent basis. Claim 16 is amended to specify that the disorder is cancer. Support for the two additional compounds added to claim 18 can be found in the disclosure, in the published application at page 15, left column, top compound and bottom compound, respectively having IC50 values from the WST-1 assay of 14 microM and 20 microM. Claim 20 is amended to incorporate subject matter from claim 3.

New claims 21-26 have been added. New claims 21 and 22 depend on claims 18 and 20, respectively, and find support in the claims to which they depend and throughout the general disclosure and corresponding claim 5. New claims 23 and 24 depend on claims 18 and 20, respectively, and find support in the claims to which they depend and throughout the general disclosure and corresponding claims 1 and 11. New claims 25

and 26 depend on claims 18 and 20, respectively, and find support in the claims to which they depend and throughout the general disclosure and corresponding claims 1 and 11

Claim 2-3 and 17 have been cancelled without prejudice or disclaimer thereto. Applicants reserve the right to file a continuation or divisional on any cancelled subject matter.

Claims 1, 4-7, 9-12, and 14-2-26 are pending upon entry of this amendment.

It is believed that the amended claims define patentable subject matter warranting their allowance for the reasons discussed herein.

## III. Conclusion

Having addressed all the outstanding issues, the amendment is believed to be fully responsive to the Office Action. It is respectfully submitted that the claims are in condition for allowance and favorable action thereon is requested.

If the Examiner believes that further changes are needed to allow the claims, then please contact the undersigned attorney as Applicants would be willing to discuss proposals to obtain the noted allowable subject matter.

Respectfully submitted,

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Ву

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# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

			Page 1 of 1
ENT NO	. 7 750 261		. 494

PATENT NO. : 7,759,361

APPLICATION NO.: 10393947

ISSUE DATE : July 20, 2010

INVENTOR(S) : Westman et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

At claim 1, column 39, line 15, delete "form an substituted" and insert --form a substituted--

At claim 1, column 39, lines 18-19, delete "C1-C10 a alkyl" and insert --C1-C10 alkyl--.

At claim 1, column 39, line 20, delete "C1-C10 a heteroaryl" and insert --C1-C10 heteroaryl--

At claim 1, column 39, lines 20-21, delete "C1-C10 a heterocyclyl" and insert --C1-C10 heterocyclyl--.

At claim 1, column 39, line 22, delete "C1-C10 a alkyloxy" and insert --C1-C10 alkyloxy--.

At claim 1, column 39, line 23, delete "C1-C10 a alkylamino" and insert --C1-C10 alkylamino--.

At claim 1, column 39, line 27, delete "C1-C10 a alkyl" and insert --C1-C10 alkyl--.

At claim 2, column 40, line 23, delete "are -CH<sub>2</sub>;" and insert -- are -CH<sub>2</sub>OH--.

At claim 3, column 40, line 42, delete "A of formula (I)" and insert -- A compound of formula (I)--.

At claim 3, column 41, line 17, delete "CONR<sup>5</sup>R<sup>7</sup>" and insert "CONR<sup>6</sup>R<sup>7</sup>."

At claim 4, column 42, line 3, delete "COR<sup>5</sup>" and insert --COR<sup>6</sup>--.

At claim 15, column 56, line 51, delete "CH<sub>2</sub>-O-CO-NR<sup>4</sup>R<sup>5</sup>" and insert -- -CH<sub>2</sub>-O-CO-NR<sup>4</sup>R<sup>5</sup>--.

At claim 15, column 57, line 5, delete "C1-C10 a heteroaryl" and insert --C1-C10 heteroaryl--.

At claim 15, column 57, line 11, delete "C1-C10 a alkyl" and insert --C1-C10 alkyl--.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

BROWDY AND NEIMARK, P.L.L.C. 624 NINTH Street N.W. Suite 300 Washington, D.C. 20001-5303

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